

Hogs like cornstalks.

ground

sults are expected.

The disk will never take the place of the plow.

Pride yourself on having fancy and well bred stock.

The result of care from start to finish is first-class butter.

All root crops should be planted as soon as a good season is in the

The seed corn must be well cared for after it is barvested if the best re-

Rapid growth from bogs cannot be secured on even the best pasture, without some grain.

Farmers in general cross hogs more than other animals, but this is considered a bad practice.

Sheep have warm wool coats, don't be afraid to turn them out in good weather even if it is cold.

When the pigs are young and weak every time the sow gets up and iles down she is liable to kill the pigs.

Watch the ewes and don't let them go through narrow spaces; it may save you a case of abortion later on

If horses will really winter better on more grain and less hay now is a good time to adopt such a line of

Dairy butter should be packed in five-pound jars and ten and twenty pound tubs to sell to the best ad-

In most cities milk sells at retail for eight cents a quart, and at that price It is the cheapest and most valuable food known.

It is just as important that every horse should have his own collar all the time as that a man should wear his own shoes.

After foaling, the mare should have not less than a week's rest before being put to work, and then the work should be light.

A hog's time is not worth anything. to raise is the kind that will grow into money quickest.

Use wire netting freely on the ronts of all your coops and housesetting out the unused air and admitting sunshine at noonday.

That bright-eyed, red combed, active pullet will surely lay soon if you are not mighty careful that she does not get quite enough to eat.

You may like skim milk cold, but that don't change the mind of the calf or pig. They want it warm like nature meant them to have it.

Tankage, a by-product of the slaughter houses, is a wholesome feed for all kinds of live stock, but

its greatest value is for hogs. When the pigs are three or four hours old the sow should be fed about one quart of rich bran or shorts in

fresh water made into a slop. Work horses, who have been pushed in the fields all summer should now have the advantage of every hour possible in the fall pastures.

Some growers of onlone prefer to cut the tops from the bulbs before they are taken from the ground paing a pair of sheep shears for the pur-

The gicher the milk the sicher will be the cream, concludes the bulletin in discussing the effect of richness of milk may have on the richness of

Tobacco growers are becoming yearly more disposed to know the form of potash, whether from kalalt, muriate or sulphate, which enters into their tobacco fertilizers.

An armful of green cornstatics will add rollsh to the hog's ration, but it should not be fed regularly until the eern to the ear has hardened beyond the possibility of frost,

The cull and drop apples may be turned into profit by feeding them to the hoge, sheep, poulry and other live stock, or converted into vinegar for home use and commercial pur-

By cuttings to but one way of prop agating grapes. Layerings and graft ing are also often used. Layering consists simply in laying a branch of a vine down in a trench and covering

Raise more nogs.

Hairy vetch may be sown in oats.

Stock always prefer to drink water that is clean.

Burr clover can be sown broadcast n permanent pasture.

Sugar beets, carrots and turnips are fine feeds for sheep.

More attention is being given to low peas as a farm crop.

Dairy cows should have rich and iberal feeding every day.

Sait is essential for a cow and she should have all she wants.

Crowded poultry will not lay-feed and care for them as we may.

The Cauliflowers must have a rather dry air, and free ventilation.

Onions sell best when graded by running them over a potato sorter.

A mule will do as much work as a horse on about two-thirds as much

Australia and Argentina lead the world in the number of horses and

Hogging off corn is by far the cheapest method of feeding, as the hogs do all the work

Where timothy is sown for seed four to six quarts is sufficient for a good stand of plants.

Alfalfa is the only known plant that will supply a nearly perfect balanced ration with corn alone.

The market demand for mules is always steady, and the farmer can make no mistake in raising them.

Salt causes the animal to drink wa ter, and a large amount of water is necessary for a flow of milk.

In treating a wire cut, the wound should be kept absolutely clean and exposed to the air and sunshine.

Cows like a variety, and this should be supplied them, being careful, however, not to make sudden changes.

Lend your crops to your live stock and see what a big interest they will pay and how promptly they pay it.

Potatoes not to be used or marketed immediately should be left in the ground as long as the ground is dry.

The first thing after the sow has farrowed she should be supplied with all the pure cold water she will drink.

The fall planting of such fruits as are adapted to planting at that season, s, as a rule, better than spring plant-

It is said that 20 acres of corn put but your time is. The best breed of a dairy herd than 30 acres in the into the silo is worth more in feeding | tendency to spread and it is desirable.

> After the fruit harvest in the orchard, go over the trees and grounds and pick up and destroy all worthless, rotten and wormy fruit.

> A good fence is absolutely necessary on a farm where live stock is kept. and there should be no farms on which live stock is not kent.

The quality of water has much to do with the quality of milk, the quaiity of eggs as well as the healthfulness of the stock that uses it.

The annual clearing out of the old stock should take place early enough so that the winter quarters will provide plenty of room for the pullets.

Test your cows for butter fat and rid your farm of those that do not produce at least one hundred and fifty pounds of butter fat per annum.

An animal will not have the neces sary relish for its feed to get the greatest amount of good out of it, if it is fed prior to the regular feeding

The best time to cut corn for late fall or winter feed is just as soon as the ears are well dented and when a few of the leaves begin to change

A large amount of feed is wasted by trregular feeding. The digestive fluids work more freely and most efficiently when called upon at regular intervals.

It is a tolerably easy matter for any pouttryman to produce eggs at a feed cost of less than 10 cents a dozen and the best of market poultry at less than ten cents a pound.

Remember to take good care of the sow. Watch her closely for the little pigs have nothing else to depend upon except their mother's milk until they are three or four weeks old.

Don't walt until the busy times next apring to clean up your garden, but start in this fall after the crops are out of the way to get everything in readiness for early spring work.

Capons neither grow nor fight and are despised by other fowls. They often show great fondness for little ohicks, and instances are not uncommon where they have been utilized in rearing broods of chickens.

## PROPER FORMATION OF TREE HEADS IN MODERN ORCHARDS

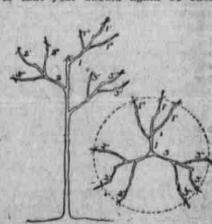
How to Prune to Get Best Results Both in Shape and Quality of Fruit-Apples and Pears Now Headed Much Lower Than Formerly to Guard Against Any Loss by Wind Storms.

(By L. C. CORBETT.) in forming the heads of orchard trees, they should be much closer to the ground than those of ornamental trees. Commercial orchards of apples and pears are now headed much lower than formerly, three feet being a very common height for starting the head, while the heads of peach and plum trees are started even as low as 18 or 20 inches from the ground,

The reason is that in certain lo calities where windstorms are frequent, a low-headed tree is less likely to be broken, and will lose a smaller proportion of fruit, and does not suffer so much from sun-scald, as the low head serves to a certain extent as a anade for the body.

During the early years of both ornamental and fruit trees, they should be pruned vigorously, because they make much longer, natural growth during the first ten years, than later.

With pears and apples, the main body branches left at planting time should not be more than eight inches long. At the close of the first season, when pruning time arrives, the growth of that year should again be short



Top of Tree After Year's Growth.

ened to at least one foot, and each of the main body branches should carry not to exceed three subdivisions about eight inches long.

The same operation should be repeated the third year, but the num ber of branches carried by each sub division should be reduced to two.

The arrangement of these branches should be based upon the same principle as the arrangement of the main body of the trees.

One additional precaution is necessary with trees which have an upright or pyramidal tendency; the terminal bud which is intended to form the leading branch from any primary branch, should be left on the outside rather than toward the center of the tree. By observing this precaution, the plant will have more tendency to spread.

On the other hand, if a tree has a bud on the opposite or inside of the

cheapest house for poultry, says a

siding I use six-inch matched lumber

and for the roof ordinary sheeting cov-

ered with two-ply prepared roofing.

The studdings are 2x3s, which are just

as satisfactory and somewhat cheaper

than 2x4s. This house can be built

for about \$20 here. It is built in two

units 6x12 feet each, with roosts, nests

and droppings boards in the rear. As

many units as needed may be added.

Results for Five Years Show Gain

of Goodly Proportions in

Yield and for Labor

Applied.

For five consecutive years of test-

ing potato spraying has proven each

year a useful and profitable practice

with me, says a writer in the Balti-

The test of three seasons ago was

the least favorable of any of the five

for the development of the principal

potato disease, late blight and rot, yet

even in that year the test showed good

sprayed field, which this senson is frost approaches.

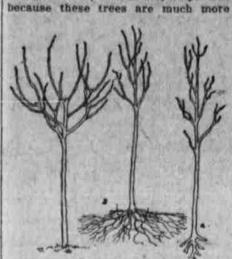
IS PROFITABLE

POTATO SPRAY

more American.

the labor applied.

trees, these precautions are not so im portant particularly in the afterpruning. At the time of forming the head, however, this is very important



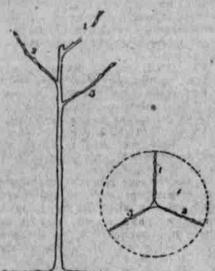
A. A five-branch tree at the end of the first season's growth. B. Relation of root to top in a nursery tree lifted for shipment. C. How the roots are cut at digging time.

liable to split down with heavy londs of fruit, than the apple and pear.

The general rule in the after-pruning of the peach tree is to shorten the yearly growth about one-half. Of course this is not always necessary, particularly during seasons of heavy crop and sparse rainfall, when the natural growth of the plant is very short.

Whenever the normal growth is under eight inches little additional pruning is necessary, but whenever it exceeds that amount, heading in will be advantageous. This serves the double purpose of preserving a compact, symmetrical tree, and at the same time reducing the annual crop

Thus, the fruit which is allowed to remain on the tree receives a larger



Plan of Tree at Planting Time.

form of a pyramid, leave the terminal amount of nourishment than would be the case were the full annual browth left and the tree permitted to bear its With common peach trees, which normal quota of fruit. The fruit will are shorter-lived than apple or pear also be larger and of better quality.

inches above the floor to prevent the

will accommodate 15 birds comforta-

bly, and 20 birds may be kept if nec-

Sunflower Seeds Good.

molting fowls and are quite an as-

sistance to the fowls in loosening the

feathers, but they should be fed spar

worth \$72 in the retail market at

home. The cost of spraying on an

Any farmer can test these figures by

three years, so as to allow for the sea-

sprayed anywhere from two to five

times. The unsprayed must also be

kept free from bugs to warrant a tair

Harvesting Sorghum

Sorghum sown for fodder should not

be cut until cool weather comes. The

average was \$2.84 each year.

prevalent.

Sunflower seeds are excellent for

HOUSE FOR TWO SMALL FLOCKS

have found the building shown | The partition is of ordinary two-inch

in the illustration about the best and | mesh wire netting, boarded up 18

writer in the Parm and Home. For male birds from fighting. Each unit

PASSING OF POPULAR FOW!

Tremendous Demand for Plymouth Rocks, Wyandottes and Others Crowding Langshans Out.

The Langshan, or, as its admirers like to call it, "the Lordly Langshan," apparently has been losing ground in popularity, like the other Asiatic fowls, It may be that as many Laugshana are bred and sold as ever, but it is very certain that not so many are exhibited as formerly. The tremendous demand for Plymouth Rocks, Wyandottes and Rhode Island Reds may make the demand for Langshans appear, relatively, small, while suffering no actual diminution, says a writer in the Country Gentleman. Still, as the poultry show is a tolerably safe trade barometer, I am inclined to believe that the demand to some extent has really diminished.

When the Langshan was first intro duced, it appeared to many fanciers of Asiatic fowls as an under-bred or poorly-bred Black Cochin. It lacked the compretness, full cushion, soft feathering, small tall and heavy footfeather that the Cochin fancier so highly prizes. It was predicted that it would not succeed as a breed, but the prediction, like many another, proved worthless. It did succeed. It put the Black Cochin badly in the shade. It became very popular. Its number became legions.

If we seek a reason for its success, our search need not be long. It was



Black Langshan Cock and Hens.

an excellent layer of large eggs. It made a good table fowl, though its white skin and black plumage handicapped it somewhat.

Value of Air-Slaked Lime. Not enough importance is placed on the value of good air-slaked lime for use in the poultry house and on the runs. Properly used, the lime is of great sanitary value. It will counteract disagreeable odors. A free use of air-slaked lime on chicken runs where gaps prevail is exceedingly beneficial. Its use no doubt also deit both inside and out of his poultry houses.

Cause of Infertile Eggs. Too many bens with the male bird frequently results in infertile eggs, and if it is found that germless eggs are being produced the number should be reduced. Breeding stock which are the progeny of related parents are asually rather apt to produce sterile eggs; this is one of the several reasons why it is a mistake to inbreed.



Fresh air and sunshine are the best germicides.

Do not keep eggs near kerosene or anything that will taint them.

Feed breeding duck a crumbly mash twice a day, morning and evening. It is not necessary to candle good eggs before taking them to market. If any farmer is in doubt concerning. his eggs, he should then candle them.

The Spanish hen's eggs, weighing seven to a pound, are the largest produced. A warm poultry house tends to

make the fowls sluggish and unpro-

ductive. Indian Runners will lay from 150 to 200 eggs a year while common ducks lay only from 25 to 50.

Dandelion leaves freshly gathered, when they are procurable, contain a valuable liver atimulant. A very common mistake made in

keeping poultry is crowding the fowla into too limited a space. Too many poultrymen hatch their chicks so late that they have not time to mature for cold weather laying.

planting one acre of ground for two or A new poultry roost is made of perforated iron tubing which has been sons that late blight and rot are less roaked in a solution deadly to insect The whole acre should receive the The Pekin is known as the leading same attention as to work and fertilimarket duck of the world and takes zation, except one-half must be

first place in the American standard of perfection. Many a person will give their chicks good care all through the brooding season and then neglect them when

they go out on range. Cold eggs can be beaten stiffer and lighter than warm ones. Before breaking them, drop in a pan of very cold

returns for the money expended and ideal time is just before the first heavy water for a few moments. frost. If cut before the cool weather, While pigeons are always consid-The results for five years on sprayed there is great danger of souring and a ered a nuisance by most farmers, if and unsprayed fields show an average consequent loss of the crop. Let the gain of 90 bushels per acre on the aorghum alone until time for the first any at all are kept, keep only Homers. Carriers. Antwerps, or some pure

## FAMOUS SUFFRAGIST

Began Life's Battle Handicapped by Fate.

Early Struggles of Dr. Anna Shaw, Head of the Suffrage Association, Who Won Success Against

Many Discouragements.

Boston, Mass.-One of the ablest enders connected with the woman suffrage movement in the United States is Dr. Anna Shaw, president of the National Suffrage association. She started for Albion college, in Mich. Igan, with just \$18 in her pocket. She had earned that \$18 by teaching school at \$1 a week, and after she had earned it she had to wait one year for the dog tax to be collected to get her pay.

Dr. Shaw was born in England, like those other pioneers of the suffrage movement, the Blackwells. But her parents took her into Michigan 52 years ago, when she was eight, having stopped four years in Massachusetts on the way. They traveled days and days in an old-fashioned prairie schooner to reach their destination. Then they lived in a log cabin. The cabin was papered with spare copies of Horace Greeley's paper, and Anna learned to read from the paper on the walls, beginning with the big letters in the advertisements and progressing to the editorials.

Miss Shaw spent four years in college and another four in the theological and medical schools of Boston university. Her people were deeply opposed to the whole plan and told



her they could do nothing whatever to help her. During that eight years she had only \$91 that she did not

She lived in an attic without any stroys other germs and bacilli. The fire-in a Boston winter. She studied wise poultryman will always have a in bed to keep warm, her breath makgood supply of lime on hand and use ing frosty clouds upon the air. She

> One day she was sitting on the stairs. She had sat down because she felt too weak to get to the top. A. woman whom she knew slightly came along and asked her why she was sitting on the stairs. When she found out she went away and borrowed \$91 frem another woman and gave it to Miss Shaw with the proviso that she was never to know from whom it came. That was the only help she had through her course. She repaid the money after she was graduated and never knew who lent it.

But about this time she acquired

the warm friendship of Mrs. Persis Addy, a widow. During the final year of her course Mrs. Addy took her into her home, and though the student paid the same board she had been paying. she had for it the comforts of a good home and the devoted care of Mrs. Addy. Mrs. Addy had planned to go to Europe and take Mirs Shaw with her as soon as the latter should have finished her course. She died just before commencement, but in her will Jeft Miss Shaw \$1,500 for the specified purpose of taking a European trip. When she was planning this journey Mrs. Addy's father said to her:

"Now, you will spend that money and it will be gone forever. Instead of cash, let me give you two bonds worth \$1,500 Then I will keep the bonds for security and lend you \$1,500 on them. When you get to work you can repay me as convenient, and when it is all paid the bonds will be yours again."

She did this, and having acquired a certain sentiment about the matter, has done the same ever since. She has left the bonds on deposit and let the interest accumulate, and they have paid the actual traveling expenses of her three trips to Europe.

Miss Shaw took the medical course because during her theological course she did missionery work in Boston. She found, to use her own words, that she "had nothing the people wanted." They did not want either her theology or her gospel. They wanted help in their material lives. She took the medical course in order that she might give them free medical treatment.

It was as a missionary doctor and preacher in the slums of Boston that Miss Shaw became convinced that there were certain defects in an ail male government which called for political power in the hands of women. She had always believed in woman suffrage. Now she decided to work for it. She began to speak for the Massachusetts Suffrage association and from that grew her national

work

DR. ANNA SHAW

earn.